

**REMARKS**

The Examiner is thanked for the indication that claims 3, 4, 11, and 12 are allowable if rewritten in independent form.

Claims 1-16 remain pending in the instant application. Claims 1, 2, 5-10, and 13-16 presently stand rejected. Claims 13-16 are amended herein. Claims 17 and 18 are hereby cancelled without prejudice. Entry of this amendment and reconsideration of the pending claims are respectfully requested.

*Claim Rejections – 35 U.S.C. § 112*

Since claims 17 and 18 have been cancelled, the Examiner's § 112 rejections of these claims are now moot.

*Claim Rejections – 35 U.S.C. § 102*

Claims 13-16 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,510,581 to Cohen.

A claim is anticipated only if each and every element of the claim is found in a single reference. M.P.E.P. § 2131 (citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628 (Fed. Cir. 1987)). "The identical invention must be shown in as complete detail as is contained in the claim." M.P.E.P. § 2131 (citing *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226 (Fed. Cir. 1989)).

Independent claim 13 has been amended to include subject matter similar to some of the subject matter of claim 4, already deemed allowable by the Examiner. Accordingly, Applicants respectfully request that the instant § 102 rejection of claim 13 be withdrawn.

*Claim Rejections – 35 U.S.C. § 103*

Claims 1-2 and 6-9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cohen in view of John Wakerly, *Digital Design, Principles and Practices* (hereinafter Wakerly). Applicants respectfully traverse the instant rejections.

"To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. All words in a claim must be

considered in judging the patentability of that claim against the prior art.” M.P.E.P. § 2143.03.

Independent claim 1 recites, in pertinent part, “a second output coupled to the third input of a next computational cell, wherein the first output is coupled to logically AND the first input with the third input...” Applicants respectfully submit that Cohen fails to teach or suggest the second output coupled to the third input.

To be sure, referring to FIG. 5 the Examiner cites “reference number 30 from the previous cell” (which is more aptly referred to as data ready line input 18) as corresponding to Applicants claimed second input and further cites “reference number 32 of the previous selection unit” as corresponding to Applicants’ claimed third input. *Final Office Action* mailed 6/1/2004, page 5, lines 1-7. However, looking at FIG. 5 of Cohen, line 30 of the previous cell (or line 18) is not coupled to line 32 of the previous cell. Consequently, the combination of Cohen and Wakerly fails to teach or suggest the above highlighted element of claim 1.

Independent claim 1 is nonobvious over Cohen and Wakerly for another independent reason. The Examiner acknowledges that “Cohen has not explicitly taught: wherein the first output is coupled to logically AND the first input with the third input.” *Final Office Action* mailed 6/1/2004, page 5, paragraph 11. However, the Examiner states,

Cohen has taught that the line 32 of figure 5 corresponds with line 28, which relates to the first input, such that when 28 goes high, 32 is also a logical true (Cohen column 3 lines 46-50).

*Final Office Action* mailed 6/1/2004, page 5, paragraph 11. Applicants are unsure what the Examiner intends with the use of the word “corresponds”; however, referring to FIG. 3, line 28 clearly is not equivalent to line 32 and line 28 is not coupled to line 32. Line 28 and line 32 are both fed as inputs to NOR gate 46. While Cohen discloses that line 32 is “high” when line 28 goes “high”, Cohen does not disclose or indicate that line 32 is “low” when line 28 goes “low”. Therefore, lines 32 and 28 are not disclosed as equivalent and the Examiner cannot rightfully state that flip-flop 70 provides a complete logical ANDing of line 28 with line 32.

Finally, the Examiner has not indicated what portion of Cohen corresponds (teaches or suggests) Applicants "first output upon which data is produced for identifying a next available buffer." If Applicants understand the Examiner to be indicating that line 74 output from flip-flop 70 is to teach or suggest the first output, then Applicants respectfully submit that the combination of Cohen and Wakerly fail to teach or suggest "the first output is coupled to logically AND the first input with the third input." The Examiner has cited Wakerly as disclosing possible internal components of flip-flop 70. However, referring to Figure 7-21(b), the outputs Q and QN clearly are not a logical ANDing of any combination of the inputs D, EN, and CLK. Accordingly, line 74 cannot be a logical ANDing of line 32 of the current stage and line 32 of the previous stage.

Consequently, based on the three independent reasons presented above, the combination of Cohen and Wakerly fails to teach or suggest all elements of claim 1, as required under M.P.E.P. § 2143.03. Independent claim 9 includes similar nonobvious elements as independent claim 1. Accordingly, Applicants request that the instant §103(a) rejections of claims 1 and 9 be withdrawn.

Dependent claims 2-8, 10-12, and 14-18 are patentable over the prior art of record for at least the same reasons as discussed above in connection with their respective independent claims, in addition to adding further limitations of their own. Accordingly, Applicants respectfully request that the instant §§ 102 and 103 rejections for claims 2-8, 10-12, and 14-18 be withdrawn.

### CONCLUSION

In view of the foregoing amendments and remarks, Applicants believe the applicable rejections have been overcome and all claims remaining in the application are presently in condition for allowance. Accordingly, favorable consideration and a Notice of Allowance are earnestly solicited. The Examiner is invited to telephone the undersigned representative if the Examiner believes that an interview might be useful for any reason.

**CHARGE DEPOSIT ACCOUNT**

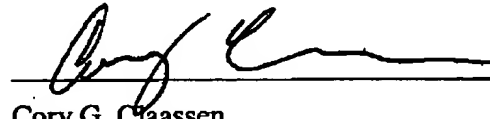
It is not believed that extensions of time are required beyond those that may otherwise be provided for in documents accompanying this paper. However, if additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a). Any fees required therefore are hereby authorized to be charged to Deposit Account No. 02-2666. Please credit any overpayment to the same deposit account.

Respectfully submitted,

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